

IN THE CLAIMS:

1. (CURRENTLY AMENDED) A method for improving the effectiveness of a chemical disinfection agent added to ~~an aqueous medium~~ a fluid used in the processing of foodstuffs comprising the steps of:

controlling the pH level of the ~~aqueous medium~~ fluid to a ~~desired level~~ range of 6 to 8 prior to or concurrent with the addition of the chemical disinfection agent to the ~~aqueous medium~~ fluid said controlled pH level causing said chemical disinfection agent to become more efficacious.

2. (CANCELLED)

3. (PREVIOUSLY PRESENTED) The method for improving the effectiveness of a chemical disinfection agent added to an aqueous medium according to claim 1, wherein said step of controlling further comprises acidification until the pH level of the aqueous medium is in the range of 6.5 to 7.

4. (PREVIOUSLY PRESENTED) The method for improving the effectiveness of a chemical disinfection agent added to an aqueous medium according to claim 1, wherein said foodstuffs is poultry and said disinfection agent is chlorine.

5. (CURRENTLY AMENDED) In a method for processing poultry comprising the steps of scalding, picking, eviscerating, washing, rinsing and chilling said poultry using a fluid ~~an aqueous medium~~, the improvement comprising the steps of:

controlling the pH level of the ~~aqueous medium~~ fluid said controlled pH level between about 6.5 to 7 causing a chemical disinfection agent to become more efficacious;

recovering at least a portion of the fluid ~~aqueous medium~~ ~~from~~ the chilling step;

filtering said recovered fluid ~~aqueous medium~~ to remove particulate matter; and

reusing said filtered recovered ~~aqueous medium~~ fluid in the chilling step.

6. (CURRENTLY AMENDED) A method for reducing the level of poultry contamination resulting ~~from~~ from the processing of poultry, wherein the processing includes the steps of scalding, picking, eviscerating, washing and rinsing said poultry, the method for reducing the level of poultry contamination comprising the steps of:

adding a chemical disinfectant to ~~process water~~ a fluid used in said processing steps;
controlling the pH level of said disinfected ~~process water~~ processing fluid between a range of 6 and 8 said controlled pH level optimizing said chemical disinfectant; and
using said disinfected processing fluid ~~process water~~ at each of said processing steps, thereby reducing the level of contamination of the poultry at each of said processing steps.

7. (CURRENTLY AMENDED) The method for reducing the level of poultry contamination resulting ~~from~~ from the processing of poultry according to claim 6, wherein said step of adding a disinfectant to ~~process water~~ processing fluid is performed during said eviscerating step.

8. (CURRENTLY AMENDED) The method for reducing the level of poultry contamination resulting ~~from~~ from the processing of poultry according to claim 6, wherein said step of adding a disinfectant to ~~process water~~ the processing fluid is performed prior to any of said processing steps.

9. (CURRENTLY AMENDED) The method for reducing the level of poultry contamination resulting ~~from~~ from the processing of poultry according to claim 6, wherein said disinfectant is selected from the group consisting of chlorine, chloramine, chlorite, chlorine dioxide and ozone.

10. (CURRENTLY AMENDED) The method for reducing the level of poultry contamination resulting ~~from~~ from the processing of poultry according to claim 6, further comprising a step of monitoring and regulating said steps of adding a disinfectant to ~~process water~~ fluid and said step of controlling the pH level of said disinfected ~~process fluid water~~.

11. (CANCELLED)

12. (CURRENTLY AMENDED) A method for reducing the level of poultry contamination resulting ~~from~~ from the processing of poultry during the poultry chilling process, the method comprising the steps of:

- recovering a portion of chiller water used in said chilling process;
- adding a disinfectant to the chiller water;
- controlling the pH level between 6 and 8 of the chiller water; and
- monitoring and regulating said steps of adding a disinfectant and controlling the pH level of the chiller water;

- filtering organic solids ~~from~~ from said recovered water, wherein at least a portion of said solids are the result of precipitation of soluble material through pH adjustment of said chiller water; and

- returning said filtered water to said chilling process, whereby reduction of the organic solids ~~from~~ from the chiller water reduces the level of poultry contamination.

13. (ORIGINAL) The method for reducing the level of poultry contamination according to claim 12, wherein said step of filtering further comprises the steps of:

- screening said recovered water through a screening device;
- floating said recovered water in a floatation unit, wherein a portion of the organic solids is floated to the top of the floatation unit; and
- fine filtering said recovered water through a filter.

14. – 15. (CANCELLED)

16. (CURRENTLY AMENDED) A method for reducing the level of poultry contamination resulting ~~from~~ from the processing of poultry, wherein the processing of said poultry includes the steps of scalding, picking, post-pick, washing, rinsing and chilling, the method comprising the steps of:

- recovering water used during at least one of said poultry processing steps;
- treating said recovered water with a disinfectant and controlling pH of said recovered water between 6 and 8; and

reintroducing said treated water into at least one heated processing step which uses heated fluid water, whereby the combination of said treated water fluid and said heated fluid water reduces the level of microorganisms within said poultry.

17. (CURRENTLY AMENDED) The method for reducing the level of poultry contamination according to claim 16, wherein said at least one heated processing step is selected ~~form~~ from the group consisting of the scalding step, the picker step and the post-pick step.

18. (CURRENTLY AMENDED) The method for reducing the level of poultry contamination according to claim 16, wherein said disinfectant is selected ~~form~~ from the group consisting of chlorine and ozone.

19. (ORIGINAL) The method for reducing the level of poultry contamination according to claim 16, wherein said step of treating said recovered water with a disinfectant includes ozonating and chlorinating said recovered water.

20. (CURRENTLY AMENDED) The method for reducing the level of poultry contamination according to claim 16, wherein said disinfectant is selected ~~form~~ from the group consisting of chlorine, chloramine, chlorite, chlorine dioxide and ozone.

21. (CURRENTLY AMENDED) A system for reducing the level of poultry contamination resulting ~~form~~ from poultry processing including the steps of scalding, picking, post-pick, washing, rinsing and chilling, the system including a water reuse and disinfection method, the water reuse method comprising the steps of:

recovering water used during at least one of said poultry processing steps;

treating said recovered water with a disinfectant to reduce the level of microorganisms therein; and

reintroducing said treated water into at least one of said poultry processing steps which uses heated water;

the disinfection method comprising the steps of:

adding a disinfectant to recovered water;

controlling the pH level of said disinfected water between 6 and 8; and
using said disinfected water in said at least one of said poultry processing steps which uses heated water, whereby the combination of said heated water and said disinfected water in said poultry processing steps reduces the level of microorganisms within said poultry.

22. (CURRENTLY AMENDED) A method for reducing the level of poultry contamination resulting ~~from~~ from poultry processing comprising the steps of:
recovering water used during said poultry processing chilling step;
removing filterable organics form said recovered water;
reacting said filtered recovered water with a disinfectant and controlling pH of said disinfected filtered water between 6 and 8; and
reintroducing said disinfected filtered water into chiller tank.

23. (ORIGINAL) The method according to claim 22 wherein the removal of said filterable organics reduces the chemical oxidation demand.

24. (ORIGINAL) The method according to claim 23 wherein the reduced chemical oxidation demand improves the efficacy of said disinfectant.

25. (ORIGINAL) The method according to claim 22 wherein the removal of said filterable organics include fats, oils, greases, proteins, blood products and lipids.

26. (ORIGINAL) The method according to claim 16 wherein said disinfection process for use in the processing of foodstuffs is designed as an intervention step in poultry processing to allow for continuous on-line reprocessing of poultry carcasses that may have accidentally become contaminated during the evisceration process.